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# Chatham District Fisheries Management Plan 1987-2000



Ministry of  
Natural  
Resources

Hon. Vincent G. Kerri  
Minister  
Mary Mogford  
Deputy Minister

## What is this paper about?

This tabloid newspaper is a summary of the draft fisheries management plan for the Chatham administrative district of the Ministry of Natural Resources. It has been written in this "highlight" format in order that fisheries resource users and other interested individuals can quickly familiarize themselves with the more significant concerns and programs which are outlined in considerably more detail in the "full" copy of the Chatham District Draft Fisheries Management Plan.

The information contained within this tabloid will give you a better idea of the present nature of our fisheries resources, what are our current concerns, and what we plan to do until 2000 to manage them in Lambton, Kent and Essex counties.

Anyone with an interest in the future of our local fisheries is welcome to review this information and provide area ministry staff with your opinions about our plans to manage these important natural resources.

## Fisheries planning: Complicated but necessary

The Chatham District Draft Fisheries Management Plan (a summarized version of which you are now reading) has been a long time in the making. Research, scientific study, negotiations and public consultation on a range of other reports and documents have occurred throughout the 1980s and earlier.

Confused? Let's review the system of fisheries planning in Ontario to see where this draft fisheries management plan fits and where it will lead us.

For well over a decade, scientists, resource managers and administrators from the Ministry of Natural Resources have recognized that the future of fisheries in Ontario cannot be left to a helter-skelter, directionless system of user demands and unco-ordinated regulations. Accordingly, under the umbrella of a general program dubbed "SPOF" (Strategic Planning for Ontario Fisheries), in 1976 the ministry established a general policy framework and a set of goals and objectives for fisheries management throughout the province.

Emerging from "SPOF", the Lake Huron Strategic Fisheries Management Plan and the Lake Erie Strategic Fisheries Management Plan are currently being prepared in order to provide a set of lake-wide strategies for individual ministry districts on the two Great Lakes which form part of the waters of the Chatham District.

As well, in 1981 Canada and the United States through the Great Lakes Fishery Commission undertook an international

planning project and adopted the Joint Strategic Plan for the Management of Great Lakes Fisheries. This international plan agreed upon a common goal for the management of the Great Lakes fisheries resources.

Naturally, the province-wide and international plans are very broad in their scope and tend to address issues and management options in general terms. However, they provide necessary overall direction that is the cornerstone for the more specific district or area plans that are currently in preparation.

Another important milestone along the road to a system of resource planning in Ontario was the development of The Southern Ontario Co-ordinated Program Strategy in 1982. In addition to fisheries, this document addressed all natural resources and provided southern Ontario targets for such things as fur bearer production, the number of camp-sites, mineral aggregate potential, etc. From this, individual area targets were farmed out to ministry districts in 1982 and 1983 as district land-use guidelines.

The Chatham District Land-Use Guidelines, is the "Bible" that resource managers locally use for providing the necessary guidelines, objectives and strategies that affect all of the ministry's many resource interests in the lands and waters of the tri-counties. This very significant document was approved as our "marching orders" into the future after a series of publications and open houses that gave you - our

resource shareholders - a chance to express your opinions and to give us the benefit of your advice.

The Chatham District Draft Fisheries Management Plan - where we are today - should therefore be seen and appreciated in the context of this entire planning system. It is the latest in a series of stepping stones aimed at establishing our priorities and refining what specific actions we must take (and when we must take them) to achieve specific results in a given area.

Indeed, we are very close to our goal of finally having in place a plan of action that will provide us with day-to-day guidance for where we shall lead our fisheries between 1987 and 2000. Later this year, the final fisheries management plan for Chatham District will be approved, based upon the draft material which you see presented here and your reaction to it. So this, in a very real sense, is your last "kick at the cat" as far as what you would like to see your Ministry of Natural Resources accomplish in the next 13 years with the fisheries program in Lambton, Kent and Essex counties.

We are very anxious to hear from you regarding your opinions on this draft management plan. Three open houses will be held in our area in September. You are most welcome to attend and express your concerns to ministry staff. You can also submit written comments to us before October 16, 1987.

And after this for us? Far less planning and much more doing!



A Ministry of Natural Resources Conservation Officer checks a non-resident for his licence on the St. Clair River near Mooretown: public relations and enforcement in action.

## Come out with your ideas

In order to provide you with an opportunity to comment directly on the Chatham District draft fisheries management plan, the following open houses will be held in this area in September 1987:

\* Tuesday, September 22, 2 p.m. to 9 p.m.  
2nd Floor Boardroom  
Kent County Municipal Building  
435 Grand Avenue West  
CHATHAM, Ont.

\* Wednesday, September 23, 2 p.m. to 9 p.m.  
Room D, 3rd Floor  
Essex Civic and Education Centre  
360 Fairview Avenue West  
ESSEX, Ont.

\* Thursday, September 24, 2 p.m. to 9 p.m.  
Oakwood Room  
Kinsmen Community Centre  
656 Lakeshore Road  
SARNIA, Ont.

Written comments will be received on any aspect of our fisheries management planning program until October 16, 1987.



A commercial fishing trawler enters Wheatley harbour with a load of Lake Erie fish.

# What you told us...

Already in proceeding with the research and writing for the Chatham District Draft Fisheries Management Plan, you - the public - have taken the time to offer your opinions and suggestions. And we're very pleased that you have done so!

The initial report in this project (Background Information and Optional Management Strategies) was published in December 1986 and copies were distributed to interested individuals throughout the tri-county area. From all accounts, this report received a great deal of attention from the media as well as from commercial and sports fishermen.

Open houses to give the public an opportunity to comment on the background document were held in Chatham, Sarnia and Windsor on January 6, 7 and 8, 1987. Approximately 250 people turned out to discuss their concerns with ministry staff and 50 took the time to complete the extensive questionnaire which was included in the background report.

In the background report, we identified 12 key issues or areas of concern that we indicated must be addressed in managing our fisheries resources in this

area. We asked you to rank these issues into what you felt to be their relative order of importance.

Sport fishermen and individuals who identified themselves as being in the tourism business ranked the issues in the following order of priority (percentages indicate the percentage of respondents who believed the issue was important):

- demand for resource exceeds its supply: 89%
- managing fish species of common concern across political jurisdictions: 89%
- illegal activity and harvest: 87%
- loss and degradation of fish habitat: 85%
- conflicts between sport and commercial fishermen and other user groups: 84%
- the problem of contaminants/pollution affecting the wholesomeness of fish: 79%
- under-utilization of certain fish species: 79%
- lack of public awareness of key issues: 78%
- concern about rare and threatened species of fish: 74%
- lack of knowledge concerning fishing activities of native persons: 72%

- incomplete scientific knowledge: 69%

- limited public access to the resource base: 48%

In addition, 66 per cent of people in this category felt that the issue "demand for the fish resources exceeds the supply" was extremely important while 18 per cent felt that the issue concerning "limited public access to the resource base" was extremely important.

Individuals who identified themselves as commercial fishermen had a slightly different view of things. They ranked the 12 issues in this order of importance (percentages indicate percentage of respondents who believed the issue was important):

- managing fish species of common concern across political jurisdictions: 84%
- lack of knowledge concerning fishing activities of native persons: 83%
- conflicts between sport and commercial fishermen and other user groups: 77%
- incomplete scientific knowledge: 75%
- the problems of contaminants/pollution affecting the wholesomeness of fish: 71%
- illegal activity and harvest: 71%
- lack of public awareness of key issues: 70%
- concern about rare and threatened species of fish: 68%
- lack of knowledge concerning fishing activities of native persons: 67%
- loss and degradation of fish habitat: 65%
- conflicts between sport and commercial fishermen and other user groups: 64%
- incomplete scientific knowledge: 63%



Lake Erie perch landed and ready for processing and market.

- lack of public awareness of key issues: 67%

- limited public access to the resource base: 67%

- under-utilization of certain fish species: 66%

- concern about rare and threatened species of fish: 51%

- loss and degradation of fish habitat: 50%

- demand for resource exceeds its supply: 50%.

In addition within the commercial fishermen group, 75 per cent believed that the issue concerning "incomplete scientific knowledge" was extremely important while only 17 per cent felt that the issue concerning "rare and threatened species" was extremely important.

After we reviewed all the public comments from the ques-

tionnaires and given verbally to us at the three January open houses, we concluded that all of these concerns and issues can be combined to fall into five major categories, as follows: the reduction of habitat, fish populations and fishing opportunities; lack of public awareness of important fisheries issues and incomplete scientific knowledge; managing fish species of common concern across jurisdictions; conflicts between resource users; and the under-utilization of certain fisheries resources.

We'd like to thank everyone who filled out the questionnaire and gave us valuable "feedback" on these important issues and on the background report in general.

## Fisheries management direction

In managing natural resources, the foundation of any rational, specific action lies in the development of a set of general principles and objectives established within a system that addresses the key issues, problems and concerns. These principles must have regard for history and set a direction that resource managers can follow into the future.

Within the general goal of the Ministry of Natural Resources,

the objective for fisheries management in southern Ontario is:

\* to provide opportunities for recreational fishing and to realize economic benefits derived from commercial and bait fisheries consistent with the maintenance of healthy fish communities.

In the Chatham District, all of our plans and specific management actions will operate within the following

three principles:

\* greater benefits can be provided by managing balanced fish communities consisting of native or naturalized self-sustaining stocks;

\* water quality and fish habitat must be maintained if fish populations are to become stable and self-sustaining;

\* a variety of users will be permitted to harvest fish stocks at levels consistent with allowable biological yields.



"Raft" of tires, about to be lowered into Rondeau Bay to provide artificial reefs for fish habitat.

## General approach to bait-fish management

Over the period 1977 to 1985, there was an annual average of 139 active bait-fish licences in the tri-counties, resulting in an annual harvest of 1,593,000 dozen bait-fish valued at \$255,000.

The target which has been identified may undergo considerable refinement as inconsistencies in harvest reporting are eliminated and our general knowledge of the bait-fish resource increases.

### MANAGING THE SPORT FISHERY

#### The Objective is:

\* to meet the projected sport fishing demand within the limits of a wisely managed and rehabilitated resource.

#### The Target For 2000 A.D. is:

\* to provide 400,240 angler days annually (present annual use is 351,820 angler days);

\* to provide a sport fish yield of 381,472 kilograms annually (present sport fish yield is 337,764 kilograms).

The fishery will be managed to maintain the current angling quality standard of 0.95 kilograms per angler day.

### MANAGING THE COMMERCIAL FISHERY

#### The Objective is:

\* to allocate to the Lake Erie and Lake Huron commercial fishing industry an allowable harvest commensurate with resource maintenance and sport fishing requirements.

#### The Target For 2000 A.D. is:

\* to sustain an average annual harvest of 8,461,000 kilograms of fish from the Chatham District waters of Lake Erie and Lake Huron (present annual commercial harvest is 9,178,126 kilograms). (NOTE: this is exclusive of coarse fish for which a market may develop but does not currently exist).

### MANAGING THE BAIT-FISHERY

#### The Objective is:

\* to manage on a sustained yield basis to ensure viable commercial use, giving priority to local needs over export demands.

#### The Target For 2000 A.D. is:

\* to provide for an annual harvest of 1,825,000 dozen bait-fish (present annual bait-fish harvest is 1,500,000 dozen).

## General approach to commercial fisheries management

Approximately 85 per cent of the actual fish harvest by weight in Chatham District is taken by the commercial fishery. In 1986, the 162 commercial licences had a combined allocation of 11,539,974 kilograms.

Sound management of the commercial fishery is critical to the future status of fish communities in Chatham District waters. While there may have been problems with uncontrolled harvests in the past, increasing compliance by the industry with the harvest control system and the industry's "self-policing" initiatives indicate that a more responsible role has been taken by this important user group.

The commercial fish targets which are identified in the draft fisheries management plan provide a focus for planning. However, it is important to

understand that these targets will not exactly equal actual harvest levels in any one particular year. Success will be determined by the extent to which fisheries managers are able to apply the harvest control system to manage fish popula-

tions at sustainable levels and be responsive to short-term fluctuations in fish populations.

It is a primary aim of the fisheries management plan to encourage mutual co-existence between the high intensity commercial fisheries on Lake Erie



A Lake Erie commercial fisherman prepares to lift gill nets.

and Lake Huron and the very active sports angling fisheries. Given the immense fish productivity of the Great Lakes waters in Chatham District, the fisheries resource will continue to be allocated on the basis of past use, overall economic

benefits and projected demand. Joint involvement and co-operation by both anglers and commercial fishermen will help to resolve real or perceived conflicts and enhance both recreational experiences and economic benefits.



Volunteer from Bluewater Anglers assists ministry staff in surveying of warmwater stream.

## SPORT FISHERIES

### General approach to warmwater fisheries management

Presently, the waters of the Chatham District provide very high quality warmwater angling opportunities and it is the intention of the fisheries management plan that this will continue.

The warmwater fishery in the district's portion of the Great Lakes system is based primarily upon walleye, which accounts for 63 per cent of the harvest, followed by yellow perch at nine per cent and the smallmouth/largemouth bass group at 6.5 per cent. These relative percentages will remain intact when the warmwater fishery target is achieved during the course of this management plan.

Lake Erie will provide about 86 per cent of the warmwater sport fish target, based on its summer walleye fishery and spring recreational smelt fishery.

Rondeau Bay will be expected to provide more fish (largemouth bass and sunfish) once its degraded habitat is rehabilitated.

In addition, general management of the warmwater sport fishery will be conducted as follows:

- \* warmwater fisheries will be managed on a self-sustained basis;
- \* Lake Erie, Detroit River, Lake St. Clair, St. Clair River and the nearshore waters of

Lake Huron will be managed as percid fish communities with walleye as the top predator;

\* the Lake St. Clair commercial fishery will be phased out by 2000, except where conditions

may warrant coarse fish removal;

\* habitat in Rondeau Bay will be rehabilitated to provide for a centrarchid fish community with largemouth bass as the

prime predator;

- \* inland waters will be managed to continue to provide spawning and nursery habitat and to maintain existing sports fisheries.



Spring recreational smelt fishing in Lake Erie near Rondeau Provincial Park.

### General approach to coldwater fisheries management

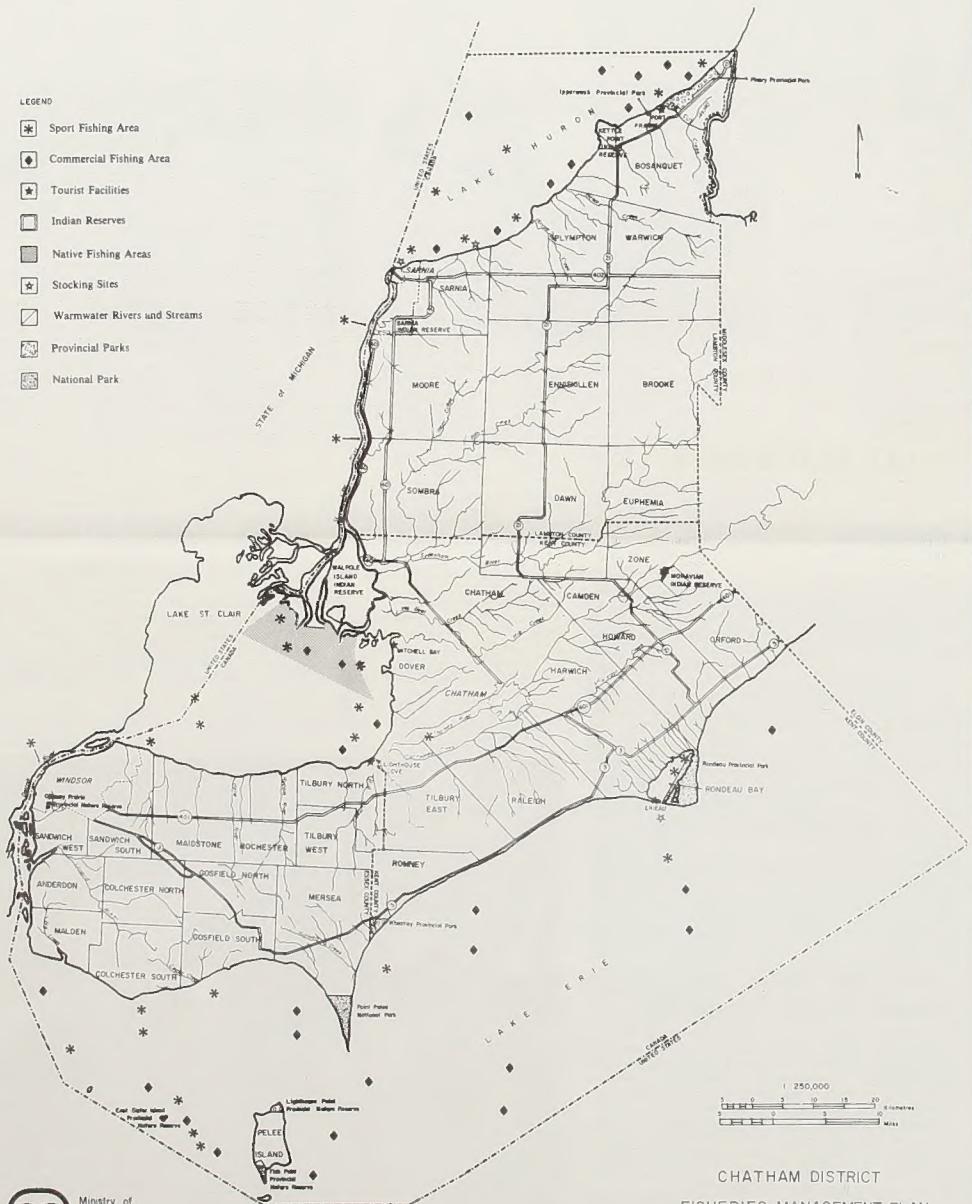
The coldwater fishery is projected to account for less than five per cent of the total Chatham District sport fish target and will continue to depend directly on artificial management techniques.

We're approaching the future of the area's coldwater sport fishery with the following premises:

- \* Pacific salmon will not be stocked into the Ontario waters of Lake Erie;
- \* rainbow trout and chinook salmon will be managed for in lower Lake Huron and the St. Clair River so that they do not
- preclude the existence of a viable commercial fishery in Lake Huron for other species nor create detectable resultant declines in the associated warmwater sport fishery;
- \* limited stocking of rainbow trout in the central basin of Lake Erie will be permitted in order to provide a local artificial fishery;
- \* options to rehabilitate lower Lake Huron with a salmonid top predator (such as lake trout) will be left open in order to remain consistent with the Lake Huron Fisheries Management Plan.

## **Chatham District Draft Fisheries Management Plan**

FISHERIES BACKGROUND INFORMATION,  
CHATHAM DISTRICT



## **Chatham District Draft Fisheries Management Plan**

## WARMWATER SPORT FISHERIES MANAGEMENT

# Chatham District Draft Fisheries Management Plan

## WARMWATER SPORT FISHERIES MANAGEMENT (continued)

STRATEGY	TACTICS	WHERE	WHEN	ADDITIONAL FUNDING REQUIRED?
8) CONTINUE CONTAMINANT MONITORING AND INFORMATION PROGRAMS	<ul style="list-style-type: none"> <li>*encourage native people to provide information on their fishing activities;</li> <li>*co-operate with the Ontario Ministry of the Environment by collecting fish samples for contaminant analysis and by assisting in the publication and distribution of relevant literature;</li> <li>*co-operate with the Ontario Ministry of the Environment to advise the public about selective fish cleaning techniques and the reasons for differences between species regarding relative contaminant levels;</li> <li>*continue to collect fish samples for International Joint Commission programs.</li> </ul>	1) Thames River 2) Lake Huron 3) Lake St. Clair	1987-1991	no
		1) Throughout district	1987-1991	no
9) DEVELOPMENT AND IMPROVEMENT OF FISHERIES MANAGEMENT TECHNIQUES	<ul style="list-style-type: none"> <li>*encourage the transfer of relevant fisheries management technology;</li> <li>*when reviewing municipal plans affecting fish communities, solicit input from MNR's fisheries research and assessment units;</li> <li>*ensure that adequate follow-up programs are carried out to assess responses to management activities;</li> <li>*provide increased annual field input to work plans for MNR research and assessment units to ensure that district fisheries management needs are represented.</li> </ul>	<ul style="list-style-type: none"> <li>1) Lake Erie 2) Lake Huron</li> <li>1) All MNR assessments units and the Chatham district office</li> <li>1) Lake Erie 2) Lake St. Clair 3) Lake Huron</li> <li>1) Lake Erie 2) Lake St. Clair 3) Lake Huron</li> <li>1) Lake Erie 2) Lake St. Clair 3) Lake Huron</li> </ul>	<ul style="list-style-type: none"> <li>1987-1991</li> <li>1987-1991</li> <li>1987-1991</li> <li>1987-1991</li> <li>1987-1991</li> </ul>	<ul style="list-style-type: none"> <li>no</li> <li>no</li> <li>no</li> <li>no</li> <li>no</li> </ul>
10) INCREASE THE NUMBER OF ACCESS POINTS TO FISHERIES RESOURCES	<ul style="list-style-type: none"> <li>*encourage anglers' use of shoreline facilities;</li> <li>*develop programs to improve the relations between anglers and private landowners;</li> <li>*encourage development of additional boat launching facilities;</li> <li>*support the development of additional marinas in non-sensitive habitat areas;</li> <li>*encourage the Ontario Ministry of Tourism and Recreation to promote the charter boat fishery;</li> <li>*generally encourage the maintenance of existing docks, piers and launching ramps and the development of new ones.</li> </ul>	<ul style="list-style-type: none"> <li>1) Detroit River 2) St. Clair River 3) Lake Erie</li> <li>1) Thames River</li> <li>1) Thames River 2) Sydenham River</li> <li>1) Lake Erie 2) Lake St. Clair 3) Lake Huron</li> <li>1) Lake Erie 2) Lake St. Clair 3) Lake Huron</li> <li>1) Lake Erie 2) Lake St. Clair 3) Lake Huron</li> </ul>	<ul style="list-style-type: none"> <li>1987-1991</li> <li>1987-1991</li> <li>1987-1991</li> <li>1987-1991</li> <li>1987-1991</li> <li>1987-1991</li> </ul>	<ul style="list-style-type: none"> <li>no</li> <li>yes</li> <li>yes</li> <li>yes</li> <li>yes</li> <li>yes</li> </ul>
11) CREATE INSHORE FISHERIES	*investigate the use of artificial reefs in accessible inshore areas for species that would be attracted to these structures. Install new reefs if they are determined to be feasible.	1) Lake Erie 2) Lake Huron	1987-1991	yes
12) INCREASE SPORT FISHING FOR UNDER-UTILIZED SPECIES	<ul style="list-style-type: none"> <li>*promote changes in the species preferences of anglers;</li> <li>*promote optimal preparation techniques to increase palatability for under-utilized species;</li> <li>*promote the taking of certain coarse fish species by means other than angling;</li> <li>*encourage derbies for under-utilized species where a community imbalance occurs.</li> </ul>	<ul style="list-style-type: none"> <li>1) Throughout district</li> <li>1) Throughout district</li> <li>1) Throughout district</li> <li>1) Lake St. Clair</li> </ul>	<ul style="list-style-type: none"> <li>post 1991</li> <li>post 1991</li> <li>post 1991</li> <li>post 1991</li> </ul>	<ul style="list-style-type: none"> <li>yes</li> <li>yes</li> <li>yes</li> <li>no</li> </ul>
13) DEVELOP A COMPREHENSIVE ENFORCEMENT PROGRAM	<ul style="list-style-type: none"> <li>*increase enforcement efforts of sport fish activities;</li> <li>*follow MNR's Chatham District enforcement plan and amend it as the needs and nature of the fishery changes;</li> <li>*increase enforcement efforts relating to offences impacting on fish habitats;</li> <li>*evaluate the effectiveness of the Report-A-Poacher program as an enforcement tool;</li> <li>*increase the use of volunteer deputy conservation officers in enforcement activities.</li> </ul>	<ul style="list-style-type: none"> <li>1) St. Clair River 2) Detroit River</li> <li>1) Throughout district</li> <li>1) Throughout district</li> <li>1) St. Clair River 2) Detroit River</li> <li>1) Throughout district</li> </ul>	<ul style="list-style-type: none"> <li>1987-1991</li> <li>1987-1991</li> <li>1987-1991</li> <li>1987-1991</li> <li>1987-1991</li> </ul>	<ul style="list-style-type: none"> <li>yes</li> <li>no</li> <li>yes</li> <li>no</li> <li>no</li> </ul>
14) INCREASE THE PROFILE OF FISHERIES IN THE EYES OF THE PUBLIC	<ul style="list-style-type: none"> <li>*provide more and better information to the public regarding the value of area fisheries and the importance of existing fish habitat;</li> <li>*improve the effectiveness of communications with all user groups;</li> <li>*publicize fisheries problems and the convictions of those who are guilty of fisheries infractions;</li> <li>*develop a spirit of custodial management of the fisheries resource among user groups;</li> </ul>	<ul style="list-style-type: none"> <li>1) Throughout district</li> <li>1) Throughout district</li> <li>1) Throughout district</li> <li>1) Lake Erie 2) Lake Huron 3) Lake St. Clair</li> <li>1) Throughout district</li> <li>1) Lake Erie 2) Lake Huron 3) Lake St. Clair</li> </ul>	<ul style="list-style-type: none"> <li>1987-1991</li> <li>1987-1991</li> <li>1987-1991</li> <li>1987-1991</li> <li>1987-1991</li> <li>1987-1991</li> </ul>	<ul style="list-style-type: none"> <li>yes</li> <li>yes</li> <li>no</li> <li>yes</li> <li>no</li> <li>yes</li> </ul>

# Chatham District Draft Fisheries Management Plan

## WARMWATER SPORT FISHERIES MANAGEMENT (continued)

STRATEGY	TACTICS	WHERE	WHEN	ADDITIONAL FUNDING REQUIRED?
	*conduct a sport fishing symposium with walleye as the theme.	1) Chatham	1987-1991	yes
15) REDUCE REAL AND PERCEIVED PROBLEMS AND CONFLICTS WITH COMMERCIAL FISHERMEN AND OTHER USERS	<ul style="list-style-type: none"> <li>*encourage joint projects (for example, through the MNR-funded community fisheries involvement program) to improve the resource base;</li> <li>*assist in convening information exchange meetings between representatives of different user groups;</li> <li>*emphasize the benefits of sport fishing to other user groups;</li> <li>*designate special sport and commercial fishing areas and seasons for high intensity fisheries that continue to exhibit user group conflict;</li> <li>*maintain a case-by-case review of development proposals in consideration of areas of significant fish habitat.</li> </ul>	<ul style="list-style-type: none"> <li>1) Lake Erie</li> <li>2) Lake St. Clair</li> <li>3) Lake Huron</li> </ul> <ul style="list-style-type: none"> <li>1) Lake Huron</li> <li>2) Lake Erie</li> </ul> <ul style="list-style-type: none"> <li>1) Throughout district</li> </ul> <ul style="list-style-type: none"> <li>1) Lake St. Clair</li> <li>2) Lake Erie</li> <li>3) Lake Huron</li> </ul> <ul style="list-style-type: none"> <li>1) Throughout district</li> </ul>	<ul style="list-style-type: none"> <li>1987-1991</li> <li>1987-1991</li> <li>no</li> <li>yes</li> <li>yes</li> <li>no</li> </ul>	
16) INCREASE EFFORTS TO INVOLVE THE PUBLIC IN FISHERIES MANAGEMENT	<ul style="list-style-type: none"> <li>*make greater use of public advisory councils or committees;</li> <li>*encourage the public to initiate projects under the MNR-funded community fisheries involvement program that are compatible with the objectives of the fisheries management plan.</li> </ul>	<ul style="list-style-type: none"> <li>1) Lake Huron</li> <li>2) Lake Erie</li> <li>3) Lake St. Clair</li> </ul> <ul style="list-style-type: none"> <li>1) Throughout district</li> </ul>	<ul style="list-style-type: none"> <li>1987-1991</li> <li>no</li> <li>yes</li> </ul>	
17) MAINTAIN CO-OPERATION WITH OHIO, MICHIGAN AND ADJACENT MNR DISTRICTS IN MANAGING FISH POPULATIONS OF COMMON CONCERN	<ul style="list-style-type: none"> <li>*continue support and contribution to Great Lake Committees of the Great Lakes Fishery Commission;</li> <li>*maintain and increase information exchange with biologists and enforcement officers from Ohio and Michigan;</li> <li>*identify fish populations of common concern and carry out co-operative studies to determine dispersal patterns and dynamics of the most significant populations;</li> <li>*develop management strategies for these populations using information provided by each agency under the guidance of the Great Lakes Fishery Commission.</li> </ul>	<ul style="list-style-type: none"> <li>1) Lake Erie</li> <li>2) Lake St. Clair</li> <li>3) Lake Huron</li> <li>4) Detroit River</li> <li>5) St. Clair River</li> </ul> <ul style="list-style-type: none"> <li>1) Lake Erie</li> <li>2) Lake St. Clair</li> <li>3) Lake Huron</li> <li>4) Detroit River</li> <li>5) St. Clair River</li> </ul> <ul style="list-style-type: none"> <li>1) Lake Erie</li> <li>2) Lake St. Clair</li> <li>3) Lake Huron</li> </ul> <ul style="list-style-type: none"> <li>1) Lake Erie</li> <li>2) Lake St. Clair</li> <li>3) Lake Huron</li> </ul>	<ul style="list-style-type: none"> <li>1987-1991</li> <li>no</li> <li>yes</li> <li>yes</li> <li>yes</li> </ul>	
18) INCREASE FISHING OPPORTUNITIES FROM INLAND AREAS	<ul style="list-style-type: none"> <li>*encourage the private sector to provide fishing opportunities in stocked ponds or gravel pits;</li> <li>*promote sport fishing for coarse species.</li> </ul>	<ul style="list-style-type: none"> <li>1) Inland waters</li> <li>1) Inland waters</li> </ul>	<ul style="list-style-type: none"> <li>1987-1991</li> <li>yes</li> </ul>	

## COLDWATER SPORT FISHERIES MANAGEMENT

STRATEGY	TACTICS	WHERE	WHEN	ADDITIONAL FUNDING REQUIRED?
I) MANAGE FOR COLDWATER FISHING OPPORTUNITIES	<ul style="list-style-type: none"> <li>*establish reliable chinook salmon egg collection sites within the lower Lake Huron watershed for the hatchery program of Bluewater Anglers of Sarnia;</li> <li>*continue to approve and provide technical guidance for chinook salmon and rainbow trout rearing and stocking into Lake Huron from the Bluewater Anglers' Hatchery in Sarnia in order to provide an artificial "put-and-grow-and-take" fishery;</li> <li>*establish an upper limit for the production of chinook salmon from the Bluewater Anglers' Hatchery;</li> <li>*continue to approve the stocking of catchable-sized rainbow trout by the Pointe Aux Pins Salmon and Trout Club to provide an artificial "put-and-take" fishery;</li> <li>*investigate the possibility of rearing and stocking hatchery-modified fish such as the triploid "super" salmon or skamania rainbow trout;</li> <li>*encourage the private sector to provide artificial fisheries in spring-fed gravel pits or where habitat conditions permit;</li> <li>*change Rondeau Bay from Division 3 to Division 2 in the Ontario Fisheries Regulations to provide a winter open season for rainbow trout.</li> </ul>	<ul style="list-style-type: none"> <li>1) Lower Lake Huron</li> <li>1) St. Clair River and Lake Huron</li> <li>1) Lake Huron</li> <li>1) Erieau, central basin of Lake Erie</li> <li>1) Lake Huron</li> <li>1) Inland areas with underlying sand or gravel overburden</li> <li>1) Rondeau Bay</li> </ul>	<ul style="list-style-type: none"> <li>1987-1991</li> <li>no</li> <li>yes</li> <li>no</li> <li>yes</li> <li>yes</li> <li>no</li> </ul>	

# Chatham District Draft Fisheries Management Plan

## COLDWATER SPORT FISHERIES MANAGEMENT (continued)

STRATEGY	TACTICS	WHERE	WHEN	ADDITIONAL FUNDING REQUIRED?
2) ENHANCE EXISTING FISH POPULATIONS	<ul style="list-style-type: none"> <li>*assist the Federal Department of Fisheries and Oceans in sea lamprey assessment and control by providing information on stream habitats and wounding rates;</li> <li>*prevent the introduction of disease by ensuring that only disease-free fish are planted, endemic diseases excepted.</li> </ul>	<ul style="list-style-type: none"> <li>1) Lake Huron</li> <li>1) Lake Huron 2) Lake Erie</li> </ul>	<ul style="list-style-type: none"> <li>1987-1991</li> <li>1987-1991</li> </ul>	<ul style="list-style-type: none"> <li>no</li> <li>yes</li> </ul>
3) MANAGE POPULATIONS AT LEVELS WITHIN THE RESOURCE CAPABILITY	<ul style="list-style-type: none"> <li>*recommend that Great Lakes Committees of the Great Lakes Fishery Commission set limits on salmonid stocking levels consistent with the food supply;</li> <li>*continue to communicate with American resource managers on the impact of stocking rates;</li> <li>*evaluate the cost-benefit relationship of an artificial spawning and rearing channel for salmonids;</li> <li>*conduct a salmon diet study on Lake Huron and intensify an existing study on Lake Erie.</li> </ul>	<ul style="list-style-type: none"> <li>1) Lake Huron 2) Lake Erie</li> <li>1) Lake Huron</li> <li>1) Lower Lake Huron-St. Clair River</li> <li>1) Lake Huron 2) Lake Erie</li> </ul>	<ul style="list-style-type: none"> <li>1987-1991</li> <li>1987-1991</li> <li>1987-1991</li> <li>1987-1991</li> </ul>	<ul style="list-style-type: none"> <li>no</li> <li>yes</li> <li>yes</li> <li>yes</li> </ul>
4) PROMOTE ACCESS TO INSHORE AND OFFSHORE SPORT FISHERIES	<ul style="list-style-type: none"> <li>*support recreational marina development in non-sensitive habitat areas;</li> <li>*encourage the Ontario Ministry of Tourism and Recreation to promote the charter boat fishery;</li> <li>*encourage anglers' use of shoreline facilities.</li> </ul>	<ul style="list-style-type: none"> <li>1) Lake Erie 2) Lake Huron 3) Lake St. Clair</li> <li>1) Lake Erie 2) Lake St. Clair 3) Lake Huron</li> <li>1) Lake Erie 2) Lake St. Clair 3) Lake Huron</li> </ul>	<ul style="list-style-type: none"> <li>1987-1991</li> <li>1987-1991</li> <li>1987-1991</li> </ul>	<ul style="list-style-type: none"> <li>no</li> <li>yes</li> <li>no</li> </ul>
5) EVALUATE THE EFFECTIVENESS OF SALMONID STOCKING PROGRAMS	<ul style="list-style-type: none"> <li>*develop an active angler diary program for Lake Huron and the St. Clair River and increase participation in the existing Lake Erie program;</li> <li>*develop an access point/shoreline creel census to monitor salmonid harvest;</li> <li>*co-operate with area sportsmen's clubs by providing fish tags for marking stocked fish and receiving and analyzing tag return information.</li> </ul>	<ul style="list-style-type: none"> <li>1) Lake Huron and St. Clair River 2) Lake Erie</li> <li>1) Lake Huron and St. Clair River</li> <li>1) Lake Huron 2) Lake Erie</li> </ul>	<ul style="list-style-type: none"> <li>1987-1991</li> <li>1987-1991</li> <li>1987-1991</li> </ul>	<ul style="list-style-type: none"> <li>yes</li> <li>yes</li> <li>yes</li> </ul>
6) REDUCE CONTAMINANT LEVELS IN THE AQUATIC ENVIRONMENT	<ul style="list-style-type: none"> <li>*provide assistance to the Ontario Ministry of the Environment and other agencies in detecting and controlling contaminant sources;</li> <li>*utilize the powers of the federal Fisheries Act to reduce contaminant sources.</li> </ul>	<ul style="list-style-type: none"> <li>1) All waters</li> <li>1) All waters</li> </ul>	<ul style="list-style-type: none"> <li>1987-1991</li> <li>1987-1991</li> </ul>	<ul style="list-style-type: none"> <li>no</li> <li>yes</li> </ul>
7) CONTINUE CONTAMINANT MONITORING AND INFORMATION PROGRAMS	<ul style="list-style-type: none"> <li>*co-operate with the Ontario Ministry of the Environment by collecting fish samples for contaminant analysis and by assisting in the publication and distribution of relevant literature;</li> <li>*continue to collect fish samples for International Joint Commission programs.</li> </ul>	<ul style="list-style-type: none"> <li>1) From waters, as recommended by the Ministry of the Environment</li> <li>1) Lake Erie 2) Lake Huron</li> </ul>	<ul style="list-style-type: none"> <li>1987-1991</li> <li>1987-1991</li> </ul>	<ul style="list-style-type: none"> <li>no</li> <li>no</li> </ul>

## COMMERCIAL FISHERIES MANAGEMENT

STRATEGY	TACTICS	WHERE	WHEN	ADDITIONAL FUNDING REQUIRED?
1) MAINTAIN Viable COMMERCIAL FISHERIES AT ANNUAL ALLOWABLE YIELD LEVELS	<ul style="list-style-type: none"> <li>*negotiate with the commercial fishing industry to set quotas at levels which will ensure maximized long-term availability of high-value species;</li> <li>*continue thorough harvest management and assessment programs to define biologically allowable yields;</li> <li>*encourage co-operative assessment programs with the industry;</li> <li>*investigate the appropriateness of allowing the commercial netting of fish on their spawning grounds on a lake-by-species basis;</li> <li>*update regulations and enhance enforcement for harvest control;</li> <li>*encourage the development of a self-policing program.</li> </ul>	<ul style="list-style-type: none"> <li>1) Lake Erie 2) Lake Huron</li> <li>1) Lake Erie 2) Lake Huron</li> <li>1) Lake Erie 2) Lake Huron</li> <li>1) Lake Huron</li> <li>1) Lake Huron</li> </ul>	<ul style="list-style-type: none"> <li>1987-1991</li> <li>1987-1991</li> <li>1987-1991</li> <li>1987-1991</li> <li>1987-1991</li> </ul>	<ul style="list-style-type: none"> <li>no</li> <li>yes</li> <li>no</li> <li>yes</li> <li>yes</li> </ul>
2) ENCOURAGE THE INDUSTRY TO DIVERSIFY AND REDUCE WASTAGE	<ul style="list-style-type: none"> <li>*adjust commercial licence conditions and/or quotas so that harvests reflect community structure;</li> <li>*develop a mechanism for marketing incidentally commercially caught fish without providing an incentive to exceed the quotas on species that have a quota;</li> </ul>	<ul style="list-style-type: none"> <li>1) Lake Erie 2) Lake Huron 3) Lake St. Clair</li> <li>1) Lake Erie 2) Lake Huron</li> </ul>	<ul style="list-style-type: none"> <li>1987-1991</li> <li>1987-1991</li> </ul>	<ul style="list-style-type: none"> <li>no</li> <li>no</li> </ul>

# Chatham District Draft Fisheries Management Plan

## COMMERCIAL FISHERIES MANAGEMENT (continued)

STRATEGY	TACTICS	WHERE	WHEN	RESOURCES REQUIRED?
	<ul style="list-style-type: none"> <li>*develop an improved mechanism for utilization of incidentally caught sport fish quotas;</li> <li>*support and encourage the industry's efforts to develop new and expanded domestic and foreign markets for under-utilized species;</li> <li>*encourage the voluntary avoidance of commercial fishing from areas of high densities of young-of-the-year yellow perch when trawling for smelt;</li> <li>*encourage the development of new technologies for expanded utilization of under-utilized species;</li> <li>*re-name under-utilized fish species to increase their marketability.</li> </ul>	<ul style="list-style-type: none"> <li>1) Lake Erie</li> <li>2) Lake Huron</li> </ul> <ul style="list-style-type: none"> <li>1) Lake Erie</li> <li>2) Lake Huron</li> <li>3) Lake St. Clair</li> </ul> <ul style="list-style-type: none"> <li>1) Lake Erie</li> </ul> <ul style="list-style-type: none"> <li>1) Lake Erie</li> <li>2) Lake Huron</li> <li>3) Lake St. Clair</li> </ul> <ul style="list-style-type: none"> <li>1) Where applicable</li> </ul>	<ul style="list-style-type: none"> <li>1987-1991</li> <li>1987-1991</li> <li>1987-1991</li> <li>1987-1991</li> <li>1987-1991</li> </ul>	<ul style="list-style-type: none"> <li>no</li> <li>yes</li> <li>no</li> <li>yes</li> <li>no</li> </ul>
3) MANAGE FOR BALANCED AND HEALTHY FISH COMMUNITIES	<ul style="list-style-type: none"> <li>*recommend that lake management committees of the Great Lakes Fishery Commission set limits on salmonid stocking levels consistent with the food supply;</li> <li>*continue communications with American resource managers on the impact of stocking programs;</li> <li>*promote commercial fishing for under-utilized species;</li> <li>*encourage researchers to monitor the effects of contaminants on the health of fish stocks;</li> <li>*assist the federal Department of Fisheries and Oceans in sea lamprey assessment by monitoring wounding rates in conjunction with other fisheries management programs.</li> </ul>	<ul style="list-style-type: none"> <li>1) Lake Huron</li> <li>2) Lake Erie</li> </ul> <ul style="list-style-type: none"> <li>1) Lake Huron</li> <li>2) Lake Erie</li> </ul> <ul style="list-style-type: none"> <li>1) Lake St. Clair</li> <li>2) Lake Erie</li> </ul> <ul style="list-style-type: none"> <li>1) Lake Huron</li> <li>2) Lake Erie</li> </ul>	<ul style="list-style-type: none"> <li>1987-1991</li> <li>1987-1991</li> <li>1987-1991</li> <li>1987-1991</li> </ul>	<ul style="list-style-type: none"> <li>no</li> <li>no</li> <li>yes</li> <li>no</li> </ul>
4) IDENTIFY, PROTECT AND REHABILITATE FISH HABITAT AND IMPROVE WATER QUALITY	<ul style="list-style-type: none"> <li>*map spawning and nursery habitat and determine its significance for each commercial fish species;</li> <li>*use the authority of the Fisheries Act, the Public Lands Act and the Lakes and Rivers Improvement Act more frequently to protect fish habitat;</li> <li>*educate all users about the requirements and intent of existing and new fisheries legislation;</li> <li>*provide fisheries habitat input and review to municipal, industrial and private plans and proposals;</li> <li>*use input from MNR research and assessment units when making decisions on plans and projects which may affect Great Lakes fish communities;</li> <li>*work with other agencies to educate the agricultural community about the benefits that certain farm practices can have on downstream fisheries and the negative effects that can result from other practices;</li> <li>*co-operate with other agencies to develop soil conservation programs across complete watersheds;</li> <li>*utilize a Wetlands Policy for Ontario once it is approved;</li> <li>*identify inoperative dykes along the Great Lakes shoreline and investigate the potential of having them removed;</li> <li>*provide assistance to the Ministry of the Environment and other agencies in detecting and controlling contaminant sources;</li> <li>*utilize the Fisheries Act to reduce contaminant sources;</li> <li>*encourage forest management projects where there is high erosion on watersheds.</li> </ul>	<ul style="list-style-type: none"> <li>1) Lake Erie</li> <li>2) Lake St. Clair</li> <li>3) Lake Huron</li> </ul> <ul style="list-style-type: none"> <li>1) Lake Erie</li> <li>2) Lake St. Clair</li> <li>3) Lake Huron</li> </ul> <ul style="list-style-type: none"> <li>1) Lake Erie</li> <li>2) Lake St. Clair</li> <li>3) Lake Huron</li> </ul> <ul style="list-style-type: none"> <li>1) Lake Erie</li> <li>2) Lake St. Clair</li> <li>3) Lake Huron</li> </ul> <ul style="list-style-type: none"> <li>1) Rondeau Bay</li> <li>2) Sydenham River</li> </ul> <ul style="list-style-type: none"> <li>1) Rondeau Bay</li> <li>2) Sydenham River</li> </ul> <ul style="list-style-type: none"> <li>1) Lake Erie</li> <li>2) Lake St. Clair</li> <li>3) Lake Huron</li> </ul> <ul style="list-style-type: none"> <li>1) Lake St. Clair</li> <li>2) Detroit River</li> </ul> <ul style="list-style-type: none"> <li>1) St. Clair River</li> <li>2) Detroit River</li> </ul> <ul style="list-style-type: none"> <li>1) St. Clair River</li> <li>2) Detroit River</li> </ul> <ul style="list-style-type: none"> <li>1) Lake Erie</li> <li>2) Lake Huron</li> </ul> <ul style="list-style-type: none"> <li>1) Lake Huron</li> <li>1) Lake Erie</li> <li>2) Lake Huron</li> </ul> <ul style="list-style-type: none"> <li>1) Lake Erie</li> <li>2) Lake St. Clair</li> <li>3) Lake Huron</li> </ul>	<ul style="list-style-type: none"> <li>1987-1991</li> </ul>	<ul style="list-style-type: none"> <li>yes</li> <li>no</li> <li>yes</li> <li>no</li> <li>yes</li> <li>yes</li> <li>no</li> <li>no</li> <li>yes</li> </ul>
5) MAINTAIN AND ENHANCE FISHERIES ASSESSMENT PROGRAMS	<ul style="list-style-type: none"> <li>*develop a daily fish harvest reporting system;</li> <li>*collect more biological information in order to increase the precision of allowable yield estimates and to increase public confidence in MNR's ability to accurately set commercial fish quotas;</li> <li>*expand index fishing to improve the assessment of the population status of commercial species;</li> <li>*conduct a comparative diet study of white perch and potentially affected species;</li> <li>*ensure that adequate monitoring programs are in place to assess responses to management activities;</li> <li>*ensure the transfer of relevant fisheries management technology;</li> </ul>	<ul style="list-style-type: none"> <li>1) Lake Erie</li> <li>2) Lake St. Clair</li> <li>3) Lake Huron</li> </ul> <ul style="list-style-type: none"> <li>1) Lake St. Clair</li> <li>2) Lake Erie</li> </ul> <ul style="list-style-type: none"> <li>1) Lake Erie</li> <li>2) Lake Huron</li> </ul> <ul style="list-style-type: none"> <li>1) Lake Erie</li> <li>2) Lake St. Clair</li> <li>3) Lake Huron</li> </ul> <ul style="list-style-type: none"> <li>1) Lake Erie</li> <li>2) Lake Huron</li> <li>3) Lake St. Clair</li> </ul> <ul style="list-style-type: none"> <li>1) MNR assessment units and district office</li> </ul>	<ul style="list-style-type: none"> <li>1987-1991</li> <li>1987-1991</li> <li>1987-1991</li> <li>1987-1991</li> <li>1987-1991</li> </ul>	<ul style="list-style-type: none"> <li>yes</li> <li>yes</li> <li>yes</li> <li>yes</li> <li>yes</li> </ul>

## **Chatham District Draft Fisheries Management Plan**

## COMMERCIAL FISHERIES MANAGEMENT (continued)

STRATEGY	TACTICS	WHERE	WHEN	FUNDING REQUIRED?
6) REDUCE REAL AND PERCEIVED PROBLEMS AND CONFLICTS WITH SPORT FISHERMEN AND OTHER USERS	<ul style="list-style-type: none"> <li>*conduct a tagging study of lake whitefish to determine stock characteristics and movement patterns.</li> <li>*encourage joint projects (for example, through the MNR-funded community fisheries involvement program) to improve the resource base;</li> <li>*assist in convening information exchange meetings between representatives of different user groups;</li> <li>*emphasize the benefits of commercial fishing to other user groups;</li> <li>*encourage commercial fishermen to advise recreational boaters of locations of fixed fishing gear;</li> <li>*restrict the commercial fishery in the use of surface nets in heavily used recreational boating areas during peak seasons;</li> <li>*encourage the voluntary avoidance of commercial fishing activities adjacent to high density cottage areas to eliminate the necessity of regulated restrictions;</li> <li>*designate special sport and commercial fishing areas and seasons for high intensity fisheries that continue to exhibit user group conflict;</li> <li>*assist the natural gas industry in its efforts to provide commercial fishermen with well-head locations and in the installation of net deflectors;</li> <li>*encourage the industry to initiate habitat rehabilitation and fish culture projects under MNR's community fisheries involvement program;</li> <li>*maintain a case-by-case review of development proposals (for example, marinas, dredging, gas and aggregate extraction, etc.) in consideration of areas of significant fish habitat.</li> </ul>	<ul style="list-style-type: none"> <li>1) Lake Huron</li> <li>1) Lake Erie</li> <li>2) Lake Huron</li> <li>3) Lake St. Clair</li> <li>1) Lake Erie</li> <li>2) Lake Huron</li> <li>3) Lake St. Clair</li> <li>1) Lake Erie</li> <li>2) Lake Huron</li> <li>3) Lake St. Clair</li> <li>1) Lake Erie</li> <li>2) Lake Huron</li> <li>1) Lake Huron</li> <li>1) Lake St. Clair</li> <li>2) Lake Erie</li> <li>3) Lake Huron</li> <li>1) All Great Lakes</li> </ul>	<ul style="list-style-type: none"> <li>1987-1991</li> <li>1987-1991</li> <li>no</li> <li>1987-1991</li> <li>no</li> <li>yes</li> <li>1987-1991</li> <li>no</li> </ul>	<ul style="list-style-type: none"> <li>yes</li> <li>no</li> </ul>
7) MAINTAIN CO-OPERATION WITH OHIO, MICHIGAN AND ADJACENT MNR DISTRICTS IN MANAGING FISH POPULATIONS OF COMMON CONCERN	<ul style="list-style-type: none"> <li>*continue support and contribution to the Great Lakes Committees of the Great Lakes Fishery Commission;</li> <li>*maintain and increase information exchange with biologists and enforcement officers from Ohio and Michigan;</li> <li>*identify those fish populations of common concern;</li> <li>*develop management strategies for these populations using information provided by each agency under the guidance of the Great Lake Fishery Commission;</li> <li>*carry out co-operative studies to determine dispersal patterns and dynamics of the most significant fish populations.</li> </ul>	<ul style="list-style-type: none"> <li>1) All Great Lakes</li> </ul>	<ul style="list-style-type: none"> <li>1987-1991</li> <li>1987-1991</li> <li>yes</li> <li>1987-1991</li> <li>yes</li> </ul>	<ul style="list-style-type: none"> <li>no</li> <li>yes</li> <li>yes</li> <li>yes</li> <li>yes</li> </ul>

## BAIT-FISHERIES MANAGEMENT

STRATEGY	TACTICS	WHERE	WHEN	ADDITIONAL FUNDING REQUIRED?
1) INCREASE KNOWLEDGE OF THE BAIT-FISH RESOURCE AND ITS USE	<ul style="list-style-type: none"> <li>*improve the accuracy and completeness of bait-fish harvest reporting systems;</li> <li>*identify and map critical habitat for bait-fish production;</li> <li>*develop reliable bait-fish allowable yield estimates by setting up index fishing surveys to assess population abundance.</li> </ul>	<ul style="list-style-type: none"> <li>1) Throughout district</li> <li>1) Throughout district</li> <li>1) Throughout district</li> </ul>	<ul style="list-style-type: none"> <li>1987-1991</li> <li>post 1991</li> <li>post 1991</li> </ul>	<ul style="list-style-type: none"> <li>no</li> <li>yes</li> <li>yes</li> </ul>
2) REGULATE ACCESS OF BAIT-FISHERMEN TO THE RESOURCE	<ul style="list-style-type: none"> <li>*maintain a schedule for access to Bluewater Bridge area;</li> <li>*implement schedules for other bait-fishery areas as required.</li> </ul>	<ul style="list-style-type: none"> <li>1) St. Clair River</li> <li>1) Throughout district</li> </ul>	<ul style="list-style-type: none"> <li>1987-1991</li> <li>1987-1991</li> </ul>	<ul style="list-style-type: none"> <li>no</li> <li>no</li> </ul>
3) MAINTAIN EXISTING BAIT-FISH POPULATIONS	<ul style="list-style-type: none"> <li>*maintain the present management system to ensure that there is a capability to restrict harvests and the number of new licences where necessary;</li> <li>*control harvest to prevent any possible over-exploitation;</li> <li>*inform all commercial bait-fish operators and dealers of their legislated requirements;</li> <li>*encourage bait-fishermen to use techniques which minimize wastage.</li> </ul>	<ul style="list-style-type: none"> <li>1) Throughout district</li> <li>1) Throughout district</li> <li>1) Throughout district</li> <li>1) Throughout district</li> </ul>	<ul style="list-style-type: none"> <li>1987-1991</li> <li>1987-1991</li> <li>1987-1991</li> <li>1987-1991</li> </ul>	<ul style="list-style-type: none"> <li>no</li> <li>no</li> <li>no</li> <li>yes</li> </ul>
4) MINIMIZE CONFLICTS WITH OTHER USERS AND PROGRAMS	*monitor bait-fish dealers to ensure that rare or game species are not sold.	1) Throughout district	1987-1991	yes

# Chatham District Draft Fisheries Management Plan

## BAIT-FISHERIES MANAGEMENT (continued)

STRATEGY	TACTICS	WHERE	WHEN	ADDITIONAL FUNDING REQUIRED?
5) ENSURE THAT THERE IS AN ADEQUATE SUPPLY OF BAIT-FISH TO MEET PROVINCIAL ANGLING NEEDS	<ul style="list-style-type: none"> <li>*restrict the issuance of export permits during bait-fish supply shortages;</li> <li>*assist retailers in locating alternate supplies of bait-fish;</li> <li>*support the development of new capture techniques to utilize offshore bait-fish populations during seasons of short supply;</li> <li>*investigate the feasibility of culturing bait-fish species to offset shortages.</li> </ul>	1) Throughout district	1987-1991	no
		1) Throughout district	1987-1991	no
		1) Throughout district	1987-1991	yes
		1) Throughout district	1987-1991	yes

## RARE AND ENDANGERED FISH SPECIES MANAGEMENT

STRATEGY	TACTICS	WHERE	WHEN	ADDITIONAL FUNDING REQUIRED?
1) IDENTIFY AND MONITOR POPULATIONS OF RARE AND POTENTIALLY RARE SPECIES	<ul style="list-style-type: none"> <li>*prepare status reports for species under review and of interest to the Committee on the Status of Endangered Wildlife in Canada;</li> <li>*update stream surveys to monitor abundance and distribution of rare species.</li> </ul>	1) Throughout district	1987-1991	yes
2) PROTECT RARE SPECIES AND THEIR HABITAT	<ul style="list-style-type: none"> <li>*prepare a brochure to educate the public about the existence of rare fish species;</li> <li>*enforce legislation and review private and municipal plans and proposals that might affect habitat areas;</li> <li>*review provisions of allowing bait-fishery in rare species habitats and exclude this activity where necessary;</li> <li>*review provisions of allowing the harvest of rare species by bait-fishermen.</li> </ul>	1) Sydenham River watershed	1987-1991	yes
		1) Throughout district	1987-1991	yes
		1) Throughout district	1987-1991	no
		1) Throughout district	1987-1991	no
3) DEVELOP PROGRAMS TO MAKE RARE SPECIES MORE COMMON	<ul style="list-style-type: none"> <li>*investigate options for habitat rehabilitation;</li> <li>*enforce fish habitat legislation.</li> </ul>	1) Throughout district	1987-1991	yes
		1) Throughout district	1987-1991	yes

## Local fisheries resource: Variety and abundance

The fisheries resources in the waters of Lambton, Kent and Essex counties are extremely rich, both in terms of diversity and productivity.

The prevailing importance of three major lakes is a distinguishing feature of the Chatham District. Included in the waterways of the three counties are 586,500 hectares of Lake Erie, 97,000 hectares of Lake Huron and 80,000 hectares of Lake St. Clair.

A brief examination of each of these lakes, as well as a closer look at the other rivers and streams of the area, will illustrate their complexity, variety and relative importance.

Southern Lake Huron provides the only significant amount of deep, coldwater habitat in the district. Species

found here include lake whitefish, chinook salmon, rainbow trout, chub and freshwater cod. In addition, there are also concentrations of fish which prefer warmer, inshore waters such as walleye, yellow perch, smallmouth bass and panfish.

Lake St. Clair is very shallow and offers ideal and extensive habitat for many warmwater species. The most common fish include walleye, yellow perch, carp, freshwater drum, channel catfish, panfish and suckers. An occasional muskellunge is also taken by anglers. The east and north shore marshes provide vital spawning and rearing habitat for several warmwater species including largemouth bass, sunfish, northern pike and yellow perch. The Thames River is a major tributary to the lake

and is the principal spawning area for walleye from Lake St. Clair, the St. Clair River and lower Lake Huron.

The Lake Erie portion of the district's waterbodies includes 171,500 hectares in Essex County as well as the Kent County portion of the central basin, a vast area of 415,000 hectares.

The Essex, or western, basin offers a typical warmwater environment which is preferred by such economically important species as yellow perch, walleye and white bass. In comparison, the central basin has conditions which provide greater depths, cooler water, lower natural nutrient levels and lower fish productivity per unit of area. The conditions in this portion of Lake Erie are more conducive to smelt production and support numbers of American-

stocked coho salmon.

Rondeau Bay, a shallow 2,700 hectare embayment almost completely separated from Lake Erie, provides warmwater habitat that is far more similar to that of Lake St. Clair than the adjoining central Erie basin. Although presently in a severely degraded condition, Rondeau Bay can offer habitat to a fish community characterized by yellow perch, black crappie, channel catfish, northern pike, white perch and largemouth bass.

The St. Clair River and Detroit River act as migratory corridors for species moving from one critical habitat to another including walleye, white bass, white sucker, black crappie and channel catfish.

There are five major watersheds which drain the land of the tri-counties and these support 103 distinct warmwater rivers, creeks or drains. These watercourses have a total length of almost 2,000 kilometres and a surface area of 2,970 hectares. Dominant species are usually coarse fish (suckers and carp), panfish or small-bodied minnows. Walleye, smallmouth and largemouth bass and northern pike are found in small numbers in 40 of these watercourses, but at a population level that is not sufficiently abundant to support extensive angling.

All of the area's inland surface waters are classified as warmwater systems because of

the virtual absence of natural springs or aquifers. These waters are incapable of supporting year-round trout or salmon populations because of these temperature limitations.

Excessive erosion from the intensively farmed agricultural lands and highly developed drainage schemes has destroyed much of the warmwater habitat and has degraded water quality. This is a situation which extends over most of the inland streams in Lambton, Kent and Essex counties. At the same time, the high mineral content in the soils coupled with their strong buffering capacity has largely insulated the fisheries from the possible negative and destructive effects of acid rain.

Much of the shoreline of the Great Lakes and connecting rivers has been engineered for the purpose of flood and erosion protection. This development has taken its toll on the production levels of species which normally use these areas for spawning, rearing or feeding.

There are at least 140 fish species known to exist within the waters of the Chatham District. Eight of them are officially considered to be rare in Canada: silver chub, spotted gar, pugnose shiner, pugnose minnow, spotted sucker, central stoneroller, brindled madtom and blackstripe topminnow. The native blue pickerel, once present in large quantities in Lake Erie, is now extinct.



Downrigger fishing for salmon on lower Lake Huron.

# The issue of "Incidental Catch"

In recent months there has been a great deal of public interest concerning the issue of the incidental catch of salmon in the gill net commercial fishery on Lake Huron. This interest followed the release of a report entitled "Incidental Harvest of Salmonids in Gill Nets in Canadian Waters of Lake Huron" to a meeting of the Lake Huron Committee of the Great Lakes Fishery Commission in Milwaukee, Wisconsin on March 16, 1987.

The report was prepared by staff of the Lake Huron Assessment Unit of the Ministry of Natural Resources in response to a request for this information from the State of Michigan. It presents very preliminary estimates of incidental catches based upon data collected during onboard sampling of commercial fishing activities on Lake Huron in 1984 and 1985.

The report stated that approximately 63,000 salmonids (salmon and trout) were caught by commercial fishermen in each of 1984 and 1985. Of this total, between 25,000 and 30,000 were lake trout for which commercial fishermen have quotas.

Pacific salmon, numbering between 33,000 to 38,000, comprised the remainder. Revised estimates indicate that for the extreme southern portion of Lake Huron approximately 29,000 salmon were caught in 1984 and 10,000 in 1985. These fish were caught "incidentally" while the fishermen were fishing for lake whitefish. The rate of incidental catch of all salmon and trout in nets set for lake whitefish is about 1.1 per cent.

Although this report is preliminary, it represents the first attempt on Lake Huron to analyze the information regarding incidental catch.

In response to concerns raised by both the sports and commercial fishermen, the ministry is establishing a program for the coming year to obtain more in-

formation about incidental catch and about angler harvests.

Elements of this program include:

- an access point creel census of sport fishermen in MNR's Wingham District Lake Huron waters;

- a voluntary angler diary program in MNR's Chatham, Wingham and Owen Sound Districts;

- a continuous enforcement presence and capability for Lake Huron;

- increased dockside checking of the commercial fishery, the charter boat operators and other anglers;

- increased on-water surveillance;

- an extension of catch sampling to include the January to March period (which has been missed previously) and to include a greater number of individual commercial fishermen on Lake Huron.

Through these methods, ministry staff will start to determine the significance of incidental catch and of angler harvests on the salmon population. We will be trying to answer the following questions:

- What is the size of the incidental catch relative to the estimated total salmon population?

- What is the impact of incidental catch and sport harvests on the salmon population?

- What is the significance of incidental catch in specific local situations?

- What is the impact of incidental catch on the availability of fish to the angler.

The ministry will be meeting with both sport and commercial fishermen. Some answers will be forthcoming during this year. However, due to the rather complex nature of this issue it is expected to require several years of investigation.

If a problem is identified,

either from incidental catch, angling or both, a number of possible solutions exist, including:

- restrictions on commercial fishing activities (that is, the imposition of possible restrictions according to areas, seasons or

gear types);

- increased stocking to allow for incidental catch;

- redirection of stocking efforts;

- seeking a compromise between sport and commercial fishermen;

- reduced angler creel limits;

- closed angling season.

Whatever action is prescribed, a better definition of the extent of incidental catch is required as well as discussions with (and between) sport and commercial fishermen.



Ministry staff sample walleye from a trap net on Lake St. Clair.

## Putting the plan into action

In this tabloid version of the draft fisheries management plan we have endeavoured to illustrate, as specifically as possible, the various step-by-step activities which will be undertaken in the ministry's fisheries program in Lambton, Kent and Essex counties.

The strategies and tactics described have been selected to

achieve the stated targets and objectives. Many of the tactics have been scheduled for implementation during the 1987 to 1991 period. The emphasis on fisheries management during this period will be on the monitoring of harvest levels and the assessment of fish stocks. Many of the elements in these programs are, by their nature, recurring projects that are closely tied to general fisheries administration.

Annual work plans will more specifically address the cost and timing for the implementation of tactics.

The implementation schedules for subsequent five-year periods will be formally prepared in 1991 and 1996.

These schedules will be subject to public notice and review.

It should be noted that all fisheries projects are subject to the requirements of the Environmental Assessment Act. As a result of complying with class assessment requirements, there may be some changes to specific tactics that have been identified.



Superb recreational angling in a highly industrialized setting: Spring walleye fishing on the St. Clair River.

**DON'T FORGET...**  
**We Want Your Comments On**  
**This Chatham District Draft**  
**Fisheries Management Plan**

Please send them to:

**District Manager**  
**Chatham District**  
**Ministry of Natural Resources**  
**Box 1168**  
**Chatham, Ontario**  
**N7M 5L8**  
**(519) 354-7340**

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